

**To:** "Robert Law" [rlaw@demaximis.com]  
**Cc:** "Mike Barbara" [mab.consulting@verizon.net]; Willard Potter" [otto@demaximis.com]; asso.Ray@epamail.epa.gov[]  
**Bcc:** []  
**From:** CN=Stephanie Vaughn/OU=R2/O=USEPA/C=US  
**Sent:** Mon 8/20/2012 5:53:40 PM  
**Subject:** Re: Single Beam Bathymetry  
([embedded image](#))

Hi Rob,

Based on our discussion this morning and a subsequent conversation I had with HQI, here is EPA's response to your email:

First, as we discussed, you may skip the single beam survey at the Route 3 Bridge area (we agree that this will have limited value), but please still include a survey in the Phase 2 Removal Area.

Second, while I understand your reservations about the usefulness of conducting another single beam survey in the RM 10.9 area, EPA would still like to have this completed. While there is no guarantee, it may prove useful for the model calibration. Given the relatively low effort involved with these surveys, we think it is a worthwhile effort.

Finally, EPA agrees that the CPG 2007 transects are the more appropriate ones to use for comparison than the USACE 2004 transects.

Please let me know if you have any questions or concerns.

Thanks,  
Stephanie

From: "Robert Law" <rlaw@demaximis.com>  
To: Stephanie Vaughn/R2/USEPA/US@EPA  
Cc: "Mike Barbara" <mab.consulting@verizon.net>, "Willard Potter" <otto@demaximis.com>  
Date: 08/17/2012 04:56 PM  
Subject: Single Beam Bathymetry

Stephanie:

Based on the scope that EPA has requested for the single-beam bathymetry, GBA has told us that this work will require a second boat because the boat they use for the multi beam survey cannot safely go in the shallow areas. This work will also be very tidal dependent.

Their initial reaction is that the single beam surveys could take 12 or more days; but they have not worked the logistics out.

They are working on the logistics and associated cost and they should have more information for the CPG next week.

With this understanding, can EPA reconsider whether there is a real value and need to survey areas such as the RM 10.9 Removal Area, the Phase 2 Removal Area and the Rte 3 bridge area?

Finally, I am concerned after our discussion yesterday that HQI does not have a good grasp of bathymetric changes that they believe support the need for doing single beam bathymetry to determine in-filling as part of this survey. The 1989 and 2004 Surveys are not the same transects as the Tierra 1995-2001 surveys

and the CPG 2007 survey as shown below - are approximately 35 ft and 55 ft offset, respectively from the nearest CPG and Tierra SB transects.

It is very likely that any change that HQI believes is related to low rates of infilling in the flats and shoals is largely related to the use of the USACE 2004 SB transects in comparison to the Tierra 1995 SB transects. The CPG would find HQI's contention more compelling if they were comparing the 2007 SB transects to the 1995 SB transects. The CPG will do as EPA directs, but believes that the rationale that HQI has set forth is not supported by a correct analysis of the data.

Thank you.

Have a good weekend.

R/

Rob

Robert Law, Ph.D.  
de maximis, inc.  
rlaw@demaximis.com  
Voice: 908-735-9315  
Fax: 908-735-2132